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| 09/828,407 | 04/06/2001 | Hiroaki Adachi | 450100-03127 | 5169 |

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| EXAMINER |
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SHIBRU, HELEN

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| ART UNIT | PAPER NUMBER |
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2621

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/828,407 | Applicant(s) ADACHI ET AL. | |
| | Examiner HELEN SHIBRU | Art Unit 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments, filed 01/03/2007, have been entered and made of record. Claims 1-16 are pending.

Response to Arguments

2. Applicant's arguments filed 01/03/2007 have been fully considered but they are not persuasive.

In re page 12 Applicant states "there is no suggestion or teaching in Newman for the use of an output module that can receives from an image conversion object, a buffer address indicating where the retrieved video frame is stored and a time code corresponding to the video frame."

In response the Examiner respectfully disagrees because Applicant's arguments is based on the cited reference of Newman individually while the rejection was made in combination with the prior art of Bruls, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Examiner stated in the Last Office Action dated on 10/03/2006 that Newman does not disclose or teach an output module that can receives from an image conversion object, a buffer address indicating where the retrieved video frame is stored and a time code corresponding to the video frame.

Newman discloses the non-linear editing system includes an output device 120 in fig. 1, such as a home television set. Newman further discloses the non-linear editing system provides

for a wide variety of hypermedia output mediums, such as computer displays, television, printers, videotapes, DVDs, and audio speakers for the edited results.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., There is no motivation for a person skilled in the art, after reading the disclosure of Newman, for using an output module that can buffer images from an image conversion object and **indicate where the retrieved video frame is stored while buffering**, (emphasis added) along with an indication of a time code corresponding to the stored video frame.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually (i.e. Bruls does not teach or suggest the use of its butter device with a non-linear media editor as disclosed in the instant invention and Newman. Bruls merely discloses the use of a buffer device with storage means to store television images that can be watched in an accelerated manner at a later stage), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Bruls does not teach or suggest the use of its butter device with a non-linear media editor as disclosed in the instant invention and Newman. Bruls merely discloses the use of a buffer device with storage

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means to store television images **that can be watched in an accelerated manner at a later stage** (emphasis added)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Bruls discloses a device for receiving, storing and displaying television images. Bruls further discloses a television that receives a buffer address and a corresponding time code. As stated above, Newman discloses the non-linear editing system includes an output device 120. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify or substitute the output device of Newman in order to read the selected image from the buffer.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The claimed invention does in fact read on the cited references for at least the reasons discussed above and as stated in the detail Office Action as follows.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman (US Pat. No. 6,154,600) in view of Bruls (US Pat. No. 6,535,252).

Regarding claim 1, Newman discloses a video editing device (see fig. 1 and fig. 5) for use with a recording and playing device operable to allow video material recording and playback and to allow non-linear editing of the video material (see col. 6 lines 13-24 and col. 7 lines 25-48), comprising:

frame processing (see fig. 5 non-linear editor (200)) means for retrieving a video frame that is a basic construction unit of the video material from said recording and playing device, which stores video material to be edited and for performing frame processing on the retrieved video frame (see col. 7 lines 49-66 and col. 8 lines 20-46);

control means for controlling said frame processing means such that at least two types of frame processing (see fig. 14 transitions (596), effects (598), paint box (600), drawing (602), character generator (604), video underlay (606), still photo underlay (608), graphics (594)) by

staid frame processing means are performed upon the retrieved video frame in parallel (see col. 9 line 1-col. 10 line 47, col. 11 lines 1-39, col. 14 lines 10-39, col. 17 lines 19-35, fig. 6B, and abstract), and

frame storage means for storing a plurality of video frames after said frame processing means completes all frame processing frame-by-frame upon the plurality of video frames and for sequentially outputting the plurality of video frames (see fig. 13 master storyboard to tape and col. 17 lines 5-18); whereby the video frames are output from said frame storage means in real-time (see col. 11 lines 16-62).

Claim 1 differs from Newman in that the claim further requires an output module that receives from an image conversion object a buffer address indicating where the retrieved video frame is stored and the corresponding time code.

In the same field of endeavor, Bruls discloses a device for receiving, storing and displaying television images. Bruls discloses a television that receives a buffer address and a corresponding time code (see col. 9 lines 23-54). Therefore in light of the teaching in Bruls it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Newman by providing a buffer address and a corresponding time code in order to read the selected image from the buffer.

Claim 1 further differs from Newman and Bruls in that the claim further requires a video editing device for use with a computer readable recording and playing device. Although Newman's system does not require the use of computing device, Newman discloses in the admitted prior art that non-linear editing on computer oriented system is well known in the art and involves digitizing analog media data recorded from a linear source and storing the data on

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a storage device such as magnetic disk drive (see col. 1 lines 23-38). Newman further provided prior arts that teaches non-linear editing of a video material using computer readable recording and playing device (see col. 1 lines 39-65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use computer readable recording and playing device to edit video material. The motivation for having recordable and reproducible by a computer is that such a method can be easily enhanced and executed multiple times.

Regarding claim 2, Newman discloses said control means causes frame processing by said frame processing means to be performed in non-real-time manner (see col. 11 lines 31-62).

Regarding claim 3, Newman discloses frame processing means comprises:

at least one image processing means for predetermined image processing on individual video frames (see fig. 5 and 6B and col. 7 lines 49-66 and col. 8 lines 20-46 and fig. 13 fine editing in storyboard (556), modify transition (558), and add graphics and audio overlays (560));

first storage (see fig. 13 place shots in storyboard (552)) means interposed between said recording and playing device and said frame processing means (the video frames are stored in the first storyboard from record shots (552) and edited in fine editing in storyboard (556), modify transition (558), and add graphics and audio overlays (560) in fig. 13. The storyboard is a working portion of the media buffer (216) in fig. 5 and see col. 16 line 65-col. 17 line 16); and

second storage means (see fig. 13, another storyboard) interposed between each of a plurality of said frame processing means (see col. 16 lines 45-col. 17 lines 18. The tasks are inter-cyclical and the consumer can create another storyboard. See also fig. 9-12 and col. 14 line

40-col. 16. The video data is processed and store in buffer and process it again from the buffer), with said control means

controlling (see fig. 6A and 6B) said recording and playing device, said first and second storage means, and each of the frame processing means such that at least two types of processing of video frames between said recording and playing device (see col. 8 line 48-col. 9 and col. 10), said first storage means, said second storage means (see col. 15 lines 3-55), and image processing on video frames in each of said image processing means are performed in parallel (see col. 8 lines 48-67), and

further controlling said frame storage means such that the plurality of video frames a stored in said frame storage means in no special order are output in a predetermined order (see col. 12 line 55-col. 13 line 4).

Regarding claim 4, Newman discloses input means for inputting an editing schedule along a time axis (see abstract);

with said control means creating processing management data representing a dependency relationship between the kind of frame processing performed on each video frame and each frame processing based on the editing schedule input through said input means (see col. 9 line 31-col. 10 line 24), and

controlling said frame processing means operable to be executed based on said processing management data (see col. 10 lines 49-67).

Regarding claim 5, Newman discloses control means stores a plurality of said created processing management data (see col. 9 lines 1-31);

selects executable frame processing from said plurality of stored processing management data (see col. 11 line 63-col. 12 line 30); and

controls said frame processing means in order to execute said selected frame processing (see col. 12 line 56-col. 13 line 35).

Regarding claim 6, Newman discloses control means defers execution of readout processing when said selected executable frame processing is processing for reading out a video frame from said recording and playing device (see fig. 7-8 and 13, and col. 13 line 36-col. 14 line 39 and col. 17 lines 5-17), and

selects a plurality of sequential video frames from video frames to be read out at the time when a plurality of said deferred-execution read-out processing are gathered and then reading out the plurality of selected video frames from said recording and playing device for storage in said first storage means (see col. 9 lines 32-67 and fig. 13).

Regarding claim 7, Newman discloses image processing means comprising:

a first image processing portion constructed by hardware (see abstract and col. 18 lines 30-59); and

a second image processing portion constructed by software (see abstract, col. 17 lines 19-30 and col. 18 lines 30-59).

Claims 8 and 15 are rejected for the same reason as discussed in claim 1 above.

Claim 9 is rejected for the same reason as discussed in claim 2 above.

Regarding claim 10, Newman discloses first and second storage means which can store video frames are used (see claim rejection 3 above);

said frame processing step comprises:

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at least one image processing step for predetermined image processing on individual video frames (see claim rejection 3 above);

a first writing step for reading out video frames from said recording and playing device and then writing them in said first storage means (see claim rejection 3 and fig. 13);

a first read-out step for reading out video frames from said first storage means and then providing them to any of image processing steps (see claim rejection 3 and fig. 13);

a second writing step for reading out video frames processed at said frame processing step and then writing them in said second storage means (see claim rejection 3 and fig. 13); and

a second read-out step for reading out video frames from said second storage means and then providing them in any of the image processing steps, and at least two types of frame processing predetermined at said first and second writing steps, said first and second read-out steps, and said image processing steps are performed in parallel, and the plurality of the video frames stored at said frame storage step in no special order are output in a predetermined order at said frame output step (see fig. 9-13 and claim rejection 3).

Claims 11-14 are rejected for the same reasons as discussed in claims 4-7 respectively above.

Regarding claim 16, Newman discloses a video editing method for editing source video data recorded on a recording medium, comprising the steps of:

playing said source video data in frames and performing frame processing on said played frame video data (see col. 8 lines 27-46);

storing the frame video data on which said frame processing is completely performed and outputting said stored frame video data as output video data (see fig. 13); and

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controlling said frame processing such that each frame of said output video data is real-time video data (see col. 11 lines 16-62);

wherein at least two types of frame processing are performed in parallel on a frame-by-frame basis upon a single played video frame (see fig. 14 transitions (596), effects (598), paint box (600), drawing (602), character generator (604), video underlay (606), still photo underlay (608), graphics (594), col. 8 lines 48-67, col. 9 line 1-col. 10 line 47, col. 11 lines 1-39, col. 14 lines 10-39, col. 17 lines 19-35, fig. 6B, and abstract).

In the same field of endeavor, Bruls discloses a device for receiving, storing and displaying television images. Bruls discloses a television that receives a buffer address and a corresponding time code (see col. 9 lines 23-54). Therefore in light of the teaching in Bruls it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Newman by providing a buffer address and a corresponding time code in order to read the selected image from the buffer.

Claim 16 further differs from Newman and Bruls in that the claim further requires a video editing device for use with a computer readable recording and playing device. Although Newman's system does not require the use of computing device, Newman discloses in the admitted prior art that non-linear editing on computer oriented system is well known in the art and involves digitizing analog media data recorded from a linear source and storing the data on a storage device such as magnetic disk drive (see col. 1 lines 23-38). Newman further provided prior arts that teaches non-linear editing of a video material using computer readable recording and playing device (see col. 1 lines 39-65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use computer readable recording

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and playing device to edit video material. The motivation for having recordable and reproducible by a computer is that such a method can be easily enhanced and executed multiple times.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Helen Shibru
February 14, 2007


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